WHAT IS CLAIMED IS:

1   1.   For use in a wireless network, a distributed

2   architecture for the reception of signals transmitted from one

3   or more mobile stations, comprising:

4   a plurality of base transceiver stations for receiving

5   said signals;

6   a Code Division Multiple Access (CDMA) detector in

7   each said base transceiver station; and

8   a combiner in each said base transceiver station for

9   combining a first signal received by a target Base transceiver

10   station with signals transmitted to said target base transceiver

11   station by said plurality of base transceiver stations.

2.   The distributed architecture as set forth in Claim 1

2   wherein each said base transceiver station further comprises an

3   encoder for producing a symbol based on an output from said CDMA

4   detector.

1   3.   The distributed architecture as set forth in Claim 2,

2   further comprising a decoder for decoding a received said

3   symbol.

1   4.   The distributed architecture as set forth in Claim 2,

2   wherein said symbol further comprises encoded elements

3   correlating the strength of said second signal received by said

4   target base transceiver stations with the expected strength of

5   said signal.

       5.   The distributed architecture as set forth in Claim 1

       further comprising an error detector for determining the error

       count when said first signal and encoded second signals,

       received from non-target base transceiver stations, are

       combined.

1   6.   The distributed architecture as set forth in Claim 1,

2   further comprising a reverse link power control for notifying

3   said mobile station to increase power if error count is high.

1   7.   The distributed architecture as set forth in Claim 1,

2   further comprising a reverse link power control for notifying

3   said mobile station to decrease power if error count is low.

1   8.   A wireless office network, comprising:

2   a mobile switching center;

3   a plurality of Base Stations each comprising a base

4   station controller and at least one base transceiver station;

5   a backhaul network for connecting said mobile switching

6   center with each said Base Station Subsystem; and

7   a distributed architecture for the reception of signals

8   transmitted from one or more mobile stations, comprising:

9   a plurality of base transceiver stations for

10   receiving said signals;

11   a Code Division Multiple Access (CDMA) detector in

12   each of said plurality of base transceiver stations; and

13   a combiner in each said base transceiver station

14   for combining a first signal received by a target base

15   transceiver station with signals transmitted to said target

16   base transceiver station by said plurality of said non-

17   target base transceiver stations.

1   9.   The wireless office network as set forth in Claim 8

2   wherein each said base transceiver station further comprises an

3   encoder for producing a symbol based on an output from said CDMA

4   detector.

1   10.   The wireless office network as set forth in Claim 9,

2   further comprising a decoder for decoding a received said

3   symbol.

1   11.   The wireless office network as set forth in Claim 8,

2   wherein said symbol further comprises encoded elements

3   correlating the strength of said second signal received by said

4   target base transceiver station and the expected strength of

5   said signal.

1   12.   The wireless office network as set forth in Claim 8

2   further comprising an error detector for determining the error

3   count when said first signal and encoded second signals,

4   received from non-target Base transceiver stations, are

5   combined.

1   13. The wireless office network as set forth in Claim 8,

2 further comprising a reverse link power control for notifying

3 said mobile station to increase power if error count is high.

1   14. The wireless office network as set forth in Claim 8,

2 further comprising a reverse link power control for notifying

3 said mobile station to decrease power if error count is low.

1   15.   For use in a wireless network, a method for receiving

2   signals transmitted from one or more mobile stations, comprising

3   the steps of:

4   detecting a baseband signal from a mobile station at

5   a plurality of base transceiver stations, one station being a

6   target base transceiver station;

7   producing   a   symbol   based   on   a   detector   output

8   determined from said baseband signal received at each non-target

9   base transceiver station;

10   combining   said   non-target   base   transceiver   station

11   symbols with said target base transceiver station symbol; and

12   sending   a   power   adjustment   signal   to   said   mobile

13   station.

1   16.   The method as set forth in Claim 15, further comprising

2   the step of:

3   sending a code pattern for said mobile station to each

4   non-target base transceiver station in said network.

1   17.   The method as set forth in Claim 15, further comprising

2   the step of:

3   sending said symbol from each said non-target base

4   transceiver station to said target base transceiver station.

1   18.   The   method   as   set   forth   in   Claim   15,   further

2   comprising:

3   decoding   said   symbols   received   from   each   said   non-

4   target base transceiver station.

     19.   The   method   as   set   forth   in   Claim   15,   further

comprising:

          responsive to a high error count, prompting said mobile

station to increase power.

1   20.   The method as set forth in Claim 15, further comprising

2   the step of:

3   responsive to a low error count, prompting said mobile

4   station to decrease power.